

# Work Order ID 70744

Tuesday, June 14, 2011 10:03:26 AM



Page 1

Item ID: D4278-047

Accept



Setup Start



Revision ID:

Stop



Item Name: Upper Rib Assembly-Straight

Start Date: 6/14/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/17/2011 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

*MF*

Date: *11-06-14*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4278

C

100

Weld per dwg A/R S.S. rod Batch: *M115778* 0.00



Large Fab

Memo

0.00

- 1- Cut tube as per dwg D4277
- 2- Drill and chamfer holes on both side
- 3- Remove marking
- 4-Deburr
- 5- Assemble bushing and weld as per dwg
- 6- Grind weld flush as per dwg

*PTD →*

*11.06.13* *(1)*

110

QC10- Inspect visual per QS1004- ground welds 0.00



QC

Memo

0.00

Quality Control

*8/14/06/14*

*(x)*

W/O: 70744		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
w/6/14	± 100	Perm. chng. should cool up <del>77</del> 24277 Dye as well. or at least in the header box.	PC	8/1.06.15	NA	NA	S w/06/14

Part No: D4278-047 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 70744**

Tuesday, June 14, 2011 10:03:26 AM



Page 2

Item ID: D4278-047

Accept



Setup Start



Revision ID:

Stop



Item Name: Upper Rib Assembly-Straight

Start Date: 6/14/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/17/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S u b o b / 14

(40)

130



Packaging

Packaging

Identify as per dwg & Stock Location: WA

0.00

Memo

0.00

SAD  
11-06-14

(1)

\*\*\*STOCK IN BASKET CELL\*\*\*

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/6/15

11-06-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Tuesday, June 14, 2011 10:03:23 AM

Page 1

Work Order ID: 70744

Parent Item: D4278-047

Parent Item Name: Upper Rib Assembly-Straight

Start Date: 6/14/2011

Required Date: 6/17/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 10.11.12 new issue DD verf:EC  
11.01.20 AS PER DWG REV.C DD verf:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304TS0.750W.049

Purchased

No

f

342.6410

2.189474



304 SQ Tube .75x.75x.049W



SAD 11-06-14

Location

Loc Qty

Loc Code

MAT018

307.3439

117029

17.2454

117690

91.3618

117775

198.7367

MAT034

35.2971

117337

35.2971

D4021-9

Manufactured

No

100

Each

124.0000

4

4



Bushing



2,1890 E. 100

11.06.14

Location

Loc Qty

Loc Code

WA

122

68063

58

70333

64

WA005

2

66437

2

4

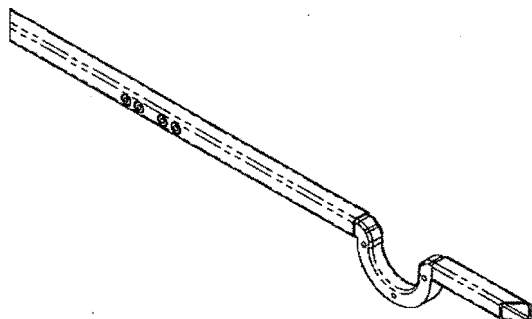
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

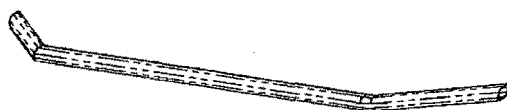
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

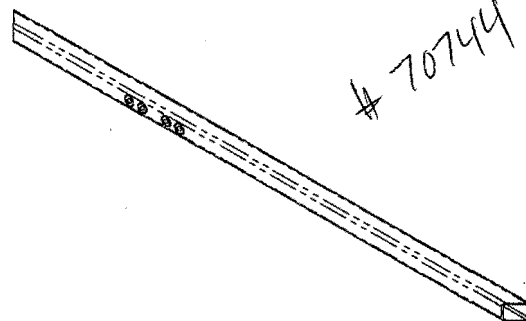
**NOTE:** Date & initial all entries



**D4278-041 UPPER RIB ASSY-HOOP**



**D4278-045 RIB ASSY, FWD CHAM**



**D4278-047 UPPER RIB ASSY-STRAIGHT**



**RELEASED**  
2011-01-18  
MP

C	ADDITIONAL HOLES ADDED IN D4278-041/-047	SC	10.12.23
B	RMV -043 (OBSOLETE)	CP	10.11.30
A	NEW ISSUE	SC	10.11.25
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		<b>D4278</b>	SHEET 1 OF 4
APPROVED		TITLE	SCALE
DE APPR.		<b>RIB ASSEMBLY</b>	NTS
DATE	10.12.23	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSONS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

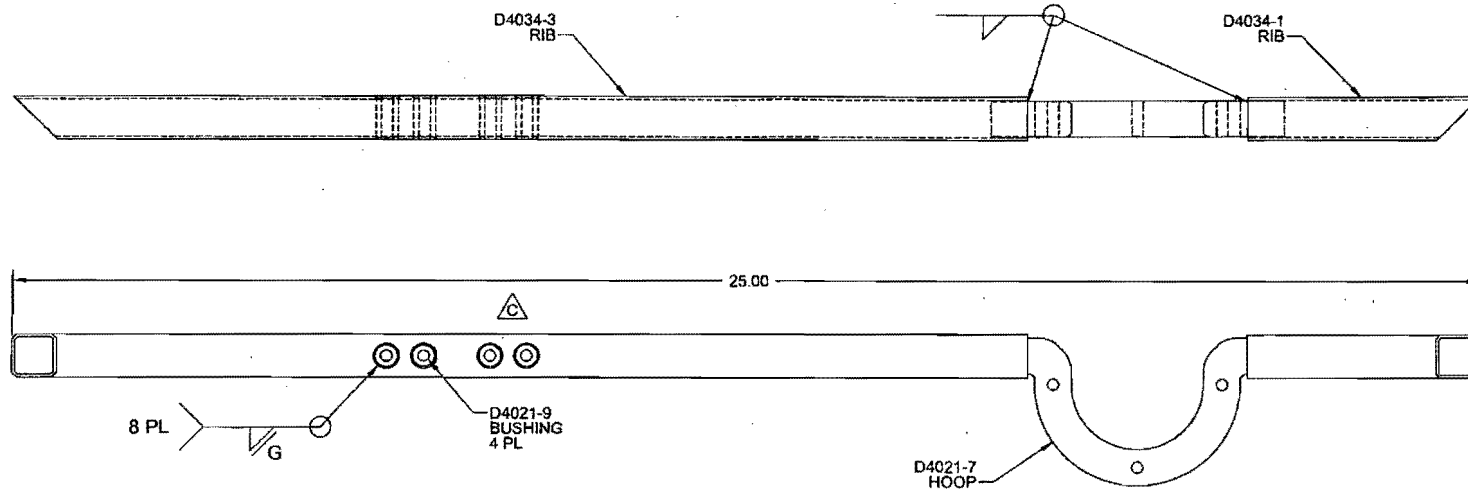
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



9715

ITEM	QTY	PART NUMBER	DESCRIPTION
	<del>1</del>	D4278-041	UPPER RIB ASSY-HOOP
1	1	D4021-7	HOOP
2	4	D4021-9	BUSHING
3	1	D4034-1	RIB
4	1	D4034-3	RIB



**D4278-041 UPPER RIB ASSY-HOOP**

#70744

**RELEASED**  
2011-01-18

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.61 lbs
- 8) WELD PER DART QSI 004

DESIGN	JPH	<b>DART AEROSPACE LTD</b>	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

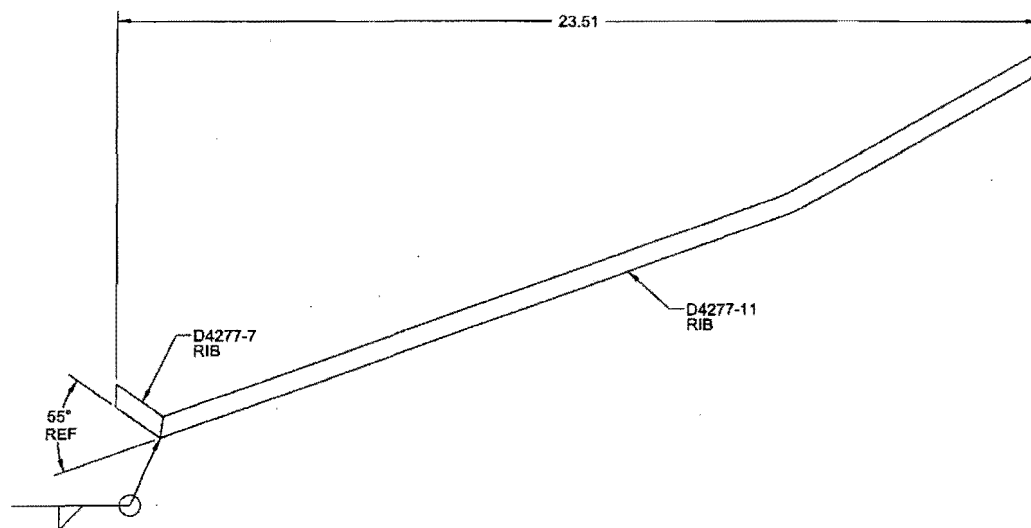
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

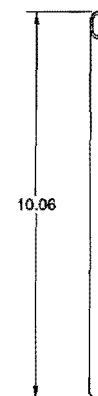
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	QTY	PART NUMBER	DESCRIPTION
	X	D4278-045	RIB ASSY, FWD CHAM
1	1	D4277-7	MID CORNER RIB, NOTCH
2	1	D4277-11	MID DIAG RIB



**D4278-045 RIB ASSY, FWD CHAM**



**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.57 lbs
- 8) WELD PER DART QSI 004.

DESIGN	JFH	<b>DART AEROSPACE LTD</b>	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
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2011-01-18

70944

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

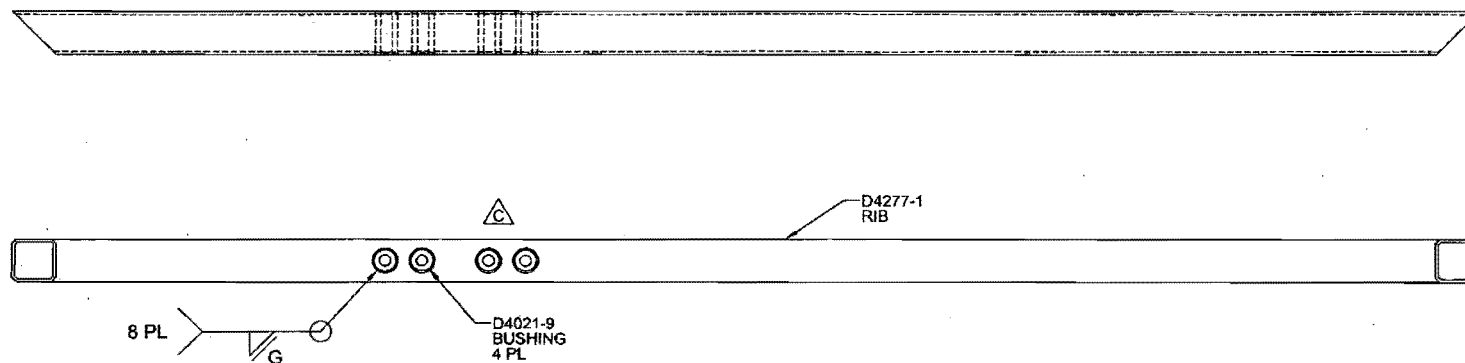
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

ITEM	QTY	PART NUMBER	DESCRIPTION
	<del>1</del>	<del>D4278-047</del>	<del>UPPER RIB ASSY-STRAIGHT</del>
1	4	D4021-9	BUSHING
2	1	D4277-1	RIB



**D4278-047 UPPER RIB ASSY-STRAIGHT**

**NOTES:**

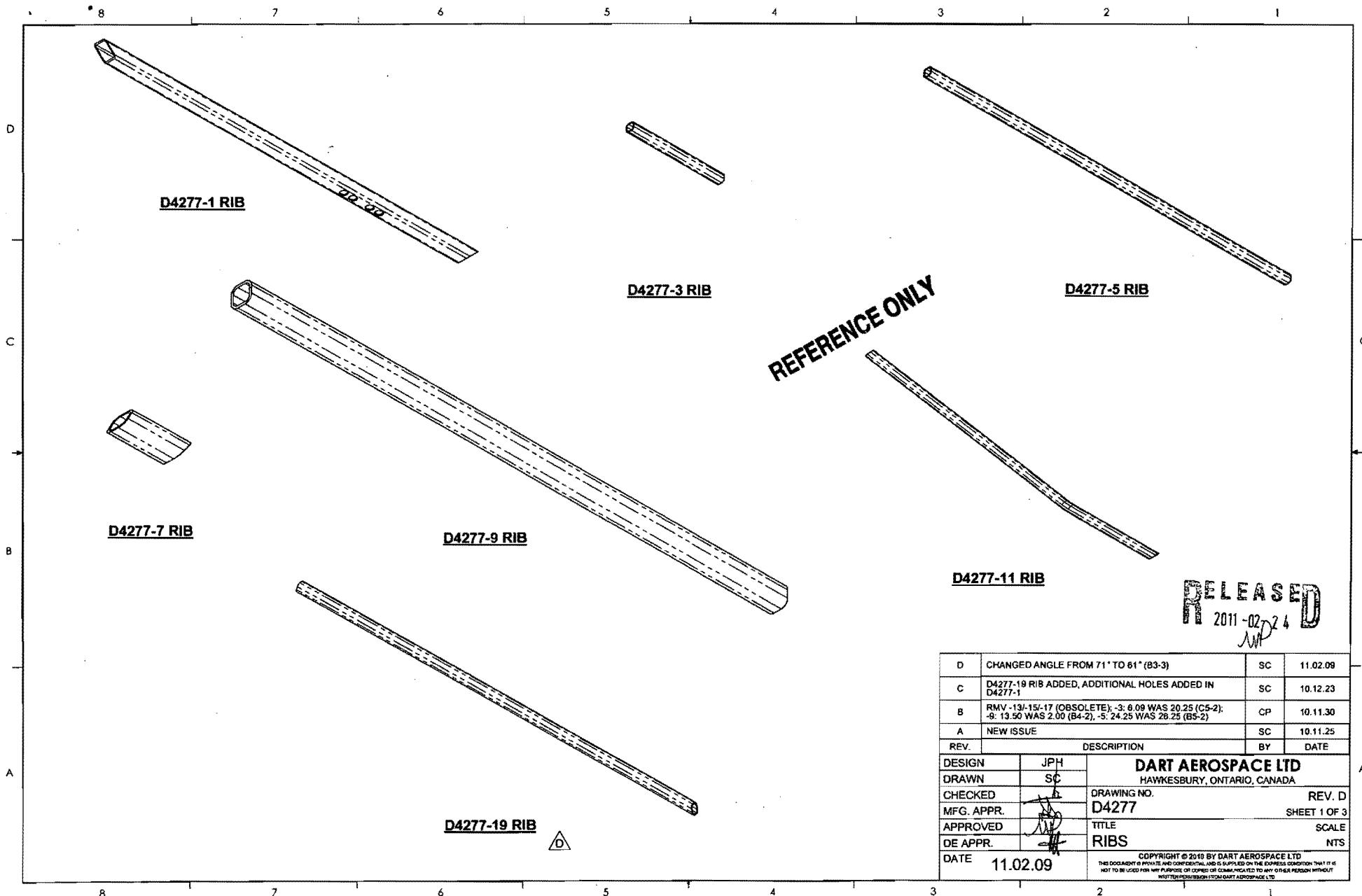
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.95 lbs
- 8) WELD PER DART QSI 004.

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MFG. APPR.		<b>D4278</b>	SHEET 4 OF 4
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**RELEASED**  
2011-01-18  
MD

470749



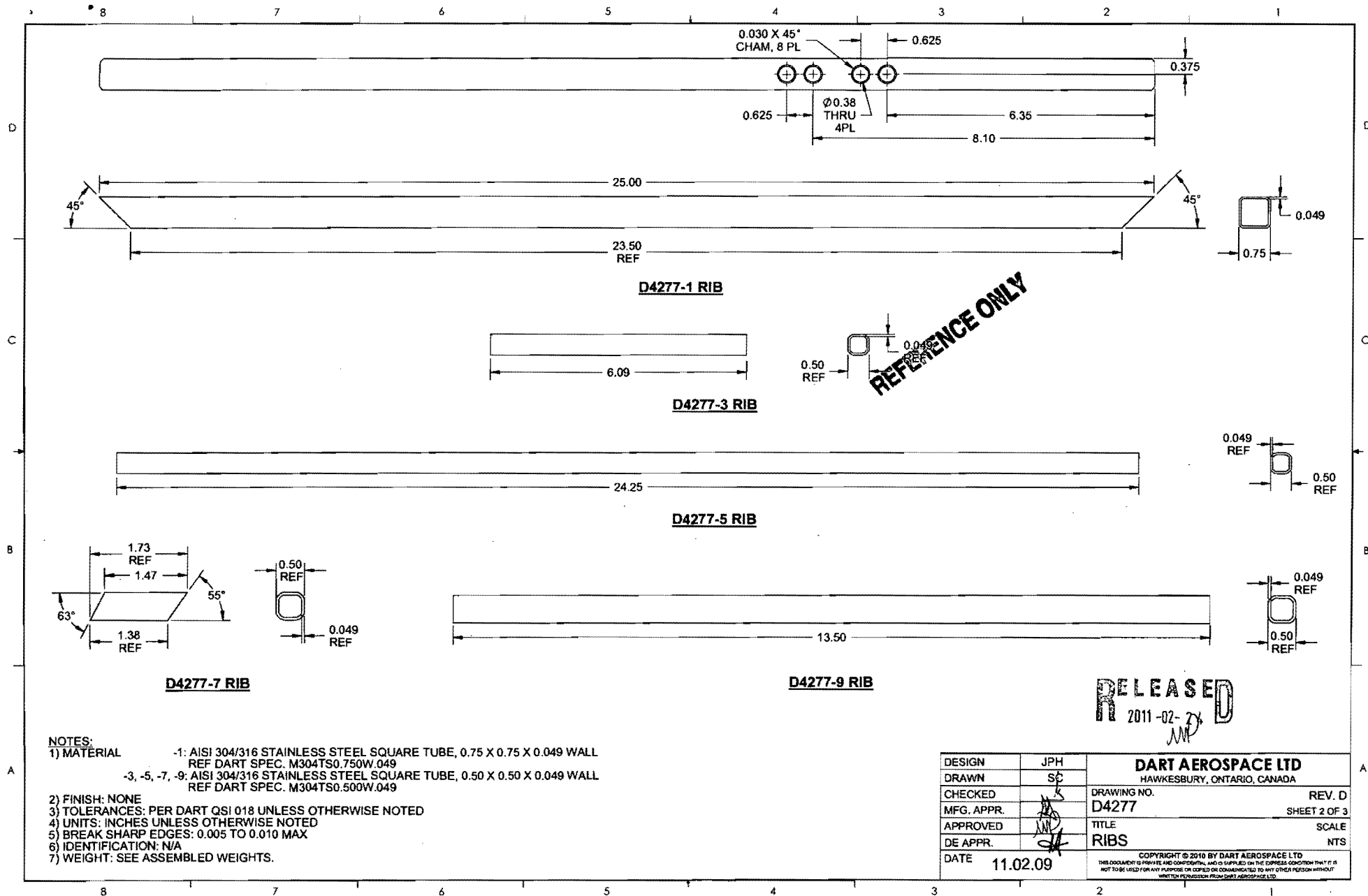


**RELEASED**  
2011-02-24

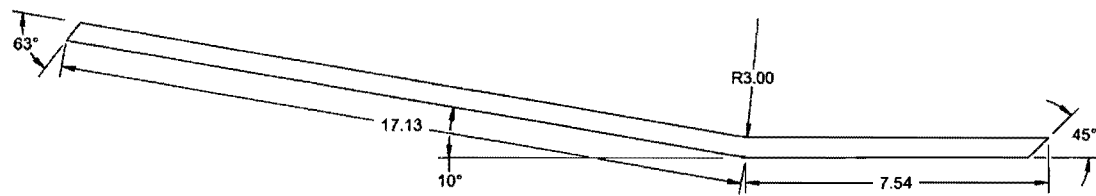
D	CHANGED ANGLE FROM 71° TO 61° (B3-3)	SC	11.02.09
C	D4277-19 RIB ADDED, ADDITIONAL HOLES ADDED IN D4277-1	SC	10.12.23
B	RMV -13/-15/-17 (OBSOLETE); -3: 6.09 WAS 20.25 (C5-2); -8: 13.50 WAS 2.00 (B4-2); -5: 24.25 WAS 28.25 (B5-2)	CP	10.11.30
A	NEW ISSUE	SC	10.11.25
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED	[Signature]	DRAWING NO.	REV. D
MFG. APPR.	[Signature]	D4277	SHEET 1 OF 3
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	RIBS	NTS
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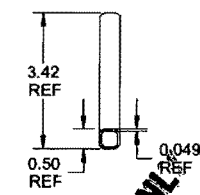




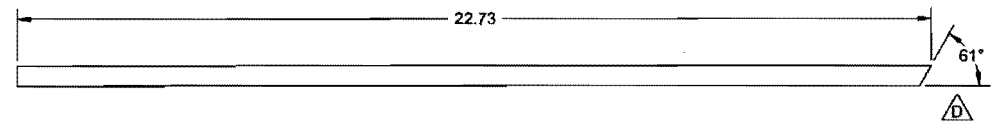




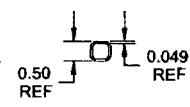
**D4277-11 RIB**



REFERENCE ONLY



**D4277-19 RIB**



RELEASED  
2011-02-24

- NOTES:**
- 1) MATERIAL -11, -19: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL  
REF DART SPEC. M304TS0.500W.049
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: SEE ASSEMBLED WEIGHTS.

DESIGN	JPH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED	K	DRAWING NO.	REV. D
MFG. APPR.		<b>D4277</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>RIBS</b>	NTS
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